OPPORTUNITIES TO IMPROVE HEALTH CARE FOR LOW-INCOME ADOLESCENTS

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Nearly one-third—3. 2 million—of the 11 million uninsured children in the US are adolescents aged 13 to 17.[1] Largely left out of recent Medicaid expansions to date, adolescents have much to gain from the new State Children's Health Insurance Program (CHIP) with its expansion up to age 19.[2] CHIP's resources offer the potential for bringing more low-income adolescents into the health care system.

A comprehensive understanding of adolescent health care needs and utilization patterns will help ensure effective use of health care resources for this age group, providing short-term and long-term benefits. Adolescence is a critical time for the future health of adults. Health habits formed during the teenage years can contribute to a lifetime of good health or lead to a future of health problems. The adolescent years are also a stage of rapid physical, emotional, and mental development. During this time of change, access to quality health care can play a key role in shaping a healthy life. Yet, we know little about the current state of adolescent health, access to health care, or sources of support or health information. Most analyses of children's health and access generally have focused on younger children.

This paper profiles the current insurance status of adolescents and presents analysis of the Commonwealth Fund's *Survey of the Health of Adolescent Girls* to focus on the specific health care needs of adolescents and the problems faced by low-income adolescents in accessing care.[3] Drawing on these findings, we discuss the potential gain with increased coverage of adolescents, the implications for

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improving the delivery of health care to adolescents to meet their needs more effectively, and the challenges of doing so in a managed-care health system.

ADOLESCENT HEALTH INSURANCE COVERAGE

Insurance coverage for adolescents varies from that of infants and younger children, particularly with respect to the availability of Medicaid insurance. Adolescents are the group of children most often forgotten by public health insurance: Medicaid covers 32% of infants, 27% of children aged 1 to 5, 20% of children aged 6 to 12, but only 16% of adolescents. Employer coverage is similar across age groups. The resulting patchwork of coverage leaves 17% of adolescents—3.2 million teenagers—uninsured.[1]

Among poor adolescents, one-half are covered under Medicaid, leaving nearly one-third—1.1 million—uninsured (Fig. 1). Profiles of uninsured adolescents in 1984 and 1989 show that they were concentrated in poor and near-poor families, lived with parents with little formal education, and were more likely to reside in the South or West of the US. Racial and ethnic minorities, especially Hispanic adolescents, were more likely than whites to be uninsured, but lower income and parent education were the strongest predictors of insurance coverage.[4,5]

As the group of children least likely to be eligible for Medicaid, adolescents are more dependent on the availability of employer-based insurance. With the

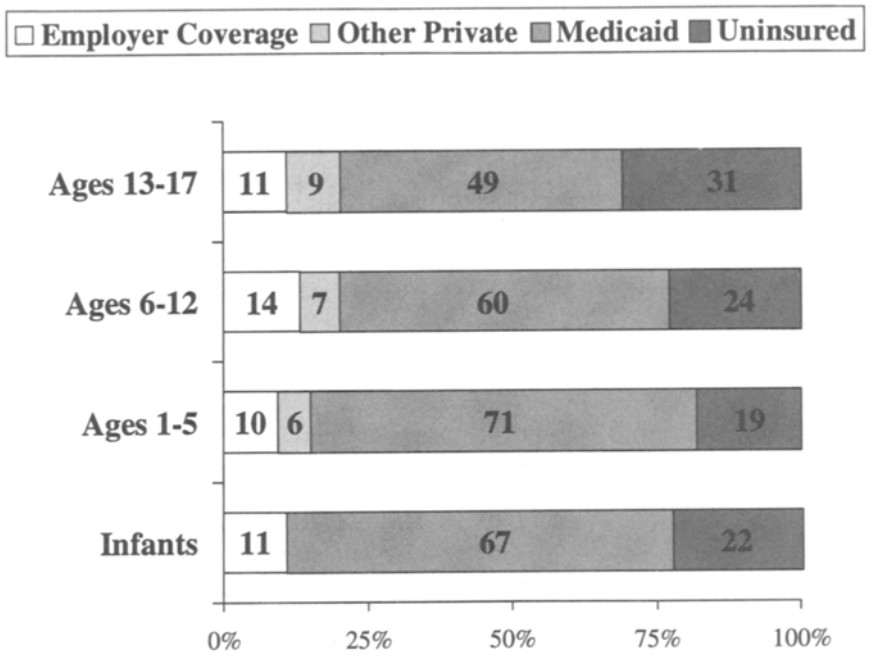

FIG. 1 Type of insurance coverage by age of low-income children (low income = less than 100% of the federal poverty level). From P. Fronstin.[1]

increasing erosion in employer-based coverage, it is not surprising that the proportion of uninsured adolescents increased from 14.4% to 16.5% from 1995 to 1996. The most vulnerable group for becoming uninsured is the near poor—families with an annual income between 100% and 149% of the federal poverty level. For adolescents living in these families, the rate of uninsured adolescents increased by as much as 25% between 1995 and 1996, from 24% to 30%.[1]

Increasing health insurance coverage for adolescents is an important first step toward improving their health and well-being. An analysis of the National Health Insurance Survey showed Medicaid is effective in reducing barriers to needed health services. Adolescents from poor families were 35% more likely than those from nonpoor families to have waited 2 or more years to go to the doctor. In addition, poor adolescents made 13% fewer physician contacts on an annual basis when compared with nonpoor adolescents. However, those with Medicaid coverage used physician services at rates similar to nonpoor adolescents, whereas uninsured adolescents lagged substantially behind.[6]

The health status and experiences of adolescents in low-income families are of particular concern. Not only is this group of adolescents likely to be at higher risk due to socioeconomic status (SES), past barriers to ready access to health care leave them with much to gain from a health care system that understands and meets their health care needs. Analysis of the Commonwealth Fund's 1997 *Survey of the Health of Adolescent Girls* underscores the high risk for lower-income adolescents and, at the same time, indicates substantial room for improving the way the health care system, including physicians and other health professionals, responds to adolescents and addresses underlying health concerns.

THE COMMONWEALTH FUND *SURVEY OF THE HEALTH OF ADOLESCENT GIRLS*

Conducted by Louis Harris and Associates, the Commonwealth Fund (the Fund) *Survey of the Health of Adolescent Girls* consisted of in-class questionnaires completed by students in grades 5 through 12. The classroom sample included a nationally representative cross section of schools, with 265 public, private, and parochial schools participating plus an oversample of 32 urban schools.

The field work took place from December 1996 through June 1997. Four different versions of the questionnaire were developed, one each for girls and boys in younger and older grades. A total of 6,728 adolescents completed the survey, including 3,575 girls and 3,153 boys. Approximately half of those surveyed were in grades 9 through 12 (3,533), and half were in grades 5 through 8 (3,195).

Urban schools were oversampled to enable comparisons of responses by race, ethnicity, and SES. Information on mother's education was obtained and is used

TABLE I Health Status and Risky Behaviors of Adolescents by Socioeconomic Status

	Total, % (N = 6,728)	Mothers Did Not Complete High School, % (n = 518)	Mothers Graduated from High School, % (n = 1,502)	Mothers Attended at Least Some College, % (n = 2,997)	*P*
Health status					
Health fair or poor	15	21	16	13	.001
Moderate or high depressive symptoms	19	30	22	16	.001
Low self-confidence	9	13	10	8	.001
Think about/want to kill myself	28	37	28	26	.001
No regular exercise*	8	15	8	6	.001
Risk behaviors					
Smoke several or a pack of cigarettes in the past week	9	16	10	7	.001
Drink alcoholic beverages at least once a month or at least once a week	11	14	12	10	.035
Used illegal drugs in the past month	13	24	13	12	.001
Ever binged and purged	12	24	11	10	.001
Binge and purge at least once a week	6	14	5	4	.001

*No regular exercise is defined as never exercising or exercising less than once a week.

here as a proxy for income and socioeconomic status because children are more likely to know their parents' education history than their parents' income. Lower SES is defined as mother's education less than high school; higher SES mothers have some college education or greater. Mothers' and fathers' education is positively correlated ($r = .4$, $P < .0001$),* and in our sample, respondents are more likely to live with their mothers (90%) than with their fathers (69%). Both boys and girls are included in this analysis.

HEALTH STATUS AND RISKS OF LOW-INCOME ADOLESCENTS

Consistent with results from national surveys of adults, lower-SES groups are significantly more likely to report worse health status (Table I). One in five

*The bivariate analyses also show that parents appear to be of similar social class. Among adolescents whose mothers had less than a high school education, more than 55% of their fathers also had less than a high school education, 28% were high school graduates, and 16% had at least some college education ($P < .001$). For adolescents whose mothers had graduated from high school, 10% of their fathers had less than a high school education, 56% were high school graduates, and 34% had at least some college education ($P < .001$). The relationship was strongest for highly educated parents: for adolescents whose mothers had at least some college education, more than 80% of their fathers had at least some college, 17% were high school graduates, and 3% had less than a high school education ($P < .001$).

adolescents with the least-educated mothers report fair or poor health, compared with 13% of adolescents in families with mothers who had at least some college education ($P < .001$). These adolescents also are most likely to report poor mental health. Based on answers to a series of 14 questions, nearly one-third of low-SES adolescents had symptoms of depression in the past 2 weeks, compared with 16% of those in higher-SES groups. Thoughts of suicide also occur at an alarmingly high rate, particularly for adolescents from low-SES families. More than one-third of low-SES adolescents, compared to one-quarter of high-SES adolescents, report that they think about or want to kill themselves ($P < .001$).

Health behaviors. Several additional factors, including alcohol and tobacco use, abuse, and violence put the health and future well-being of adolescents at risk. These factors, while not limited to low-SES groups, are 50% to 100% more prevalent among low-SES adolescents.

Adolescents whose mothers had less than a high school education are more likely than adolescents with college-educated mothers to have smoked several cigarettes in the past week (16% vs. 7%, $P < .001$), drank alcohol in the last month (14% vs. 10%, $P < .035$), used illegal drugs in the past month (24% vs. 12%, $P < .001$), and binged and purged in the past week (14% vs. 4%, $P < .001$) A notable proportion of those turning to alcohol appear to do so to escape from daily concerns. When asked, "Why do you drink alcoholic beverages?" 29% of low-SES adolescents reply that it helps to relieve stress, and 28% say it helps them to forget problems. Among adolescents in higher-SES groups, 18% report they drink to relieve stress, and 17% say it helps them to forget their problems.

Physical and sexual abuse. Overall, one in six adolescents report either physical or sexual abuse (Table II); 21% of high school girls and 13% of high school boys report that they had been either sexually or physically abused. Although the presence of abuse was found among all adolescent income groups, those in families with low SES are more likely to experience abuse: 18% of low-income adolescents grades 5 through 12 report sexual abuse, compared with 6% of adolescents from higher-income families ($P < .001$). Circumstances of the abuse did not vary significantly across SES groups in that the abuser was always most likely to be a family member or friend, the abuse occurred more than once, and the abuse occurred at home.

Nearly 3 in 10 abused girls and half of abused boys report they had not told anyone about their experience. Adolescents in low-SES groups are more likely than other adolescents to keep the experience to themselves ($P < .107$). Low-SES

TABLE II Abuse and Risk of Violence of Adolescents by Socioeconomic Status

	Total, % (N = 6,728)	Mothers Did Not Complete High School, % (n = 518)	Mothers Graduated from High School, % (n = 1,502)	Mothers Attended at Least Some College, % (n = 2,997)	*P*
Abuse					
Sexually abused	7	18	5	6	.001
Physically abused	11	22	12	10	.001
Physically and sexually abused adolescents					
Abuse occurred at home	57	55	62	56	.256
Abuser was a family member	61	63	63	59	.584
Abuser was a family friend	14	17	15	13	.524
Abuse occurred more than once	63	58	65	64	.510
Talked to no one about the abuse	28	31	27	28	.107
Risk of violence					
Rarely/never feel safe at home	2	5	3	2	.001
Rarely/never feel safe in neighborhood	4	9	4	3	.001
Rarely/never feel safe in school	5	9	5	3	.001
Wanted to leave home due to violence at home	25	47	26	21	.001
A boyfriend/girlfriend forced respondent to have sex against his/her will (when did not want to)	6	17	6	4	.001
Not ended a relationship due to fear of physical abuse	6	12	5	6	.001

adolescents are the only group more likely to tell no one than to tell a best friend or their mothers ($P < .04$).

Instances of date rape appear more common among low-SES adolescents. Asked only of high school students, the survey results show that 17% of low-SES adolescents report a time when they were forced to have sex against their will, compared with 4% of higher-SES adolescents ($P < .001$). In addition, threats of violence prolong destructive relationships. Twice as many low-income high school students stayed in a relationship out of fear of physical abuse than adolescents in higher-SES groups ($P < .001$).

Reflecting a world permeated by violence, low-income adolescents are twice as likely as higher-SES adolescents not to feel safe at home, in school, or in their neighborhood (Table II). The level of fear at home pushes many young people to contemplate running away: 47% of low-SES adolescents report that they think

about or want to leave home due to violence, compared with 21% of adolescents from higher-SES families ($P < .001$).

Adolescents with multiple risk factors. Adolescents with less educated mothers are at greater risk of experiencing at least one seriously unsafe health behavior or negative life event such as heavy drinking, physical or sexual abuse, high number of depressive symptoms, or bingeing and purging weekly (Table III). Fifty-seven percent of adolescents whose mothers had less than a high school education report at least one unhealthy behavior or negative event, 35% report at least two, and 21% report three or more. Among adolescents whose mothers were college educated, 37% report at least one risky behavior or negative event, 15% report at least two, and 7% report three or more.

The presence of multiple risk factors is not limited to adolescents from low-income families. Abuse and poor mental health are associated strongly with multiple unhealthy behaviors or negative event experiences. Among adolescents who were either a victim of sexual abuse, physical abuse, or date rape, 33% report at least one unsafe behavior or outcome, and 55% report three. Those adolescents exhibiting symptoms of poor mental health are also notably more likely to engage in risky behaviors or be exposed to other risk factors. For those

TABLE III Multiple Serious Risky Behaviors and/or Negative Life Events of Adolescents*

Number of Serious Health Risks or Negative Life Events	Total (N = 6,728)	Mothers Did Not Complete High School (n = 518)	Mothers Graduated from High School (n = 1,502)	Mothers Attended at Least Some College (n = 2,997)	*P*
	100%	100%	100%	100%	
0	59%	44%	57%	63%	.001
1	22	22	22	22	.906
2	9	13	11	8	.001
3	5	9	5	3	.001
4+	5	13	5	4	.001

*Note: We analyzed a portion of adolescents with 1–16 serious risky behaviors or negative life events. The 6 negative life events are physical or sexual abuse that occurred more than once; being forced to have sex against his/her will; staying in a relationship due to fear about abuse from boyfriend/girlfriend; and never or rarely feeling safe at home, in school, or in the neighborhood. The 7 serious risky behaviors are smoking at least a pack of cigarettes per week; drinking at least 3 alcoholic beverages per week; bingeing and purging weekly; wanting to kill oneself; and using drugs in the past month because it helps to escape reality, makes the respondent feel good, or because he/she hangs around with people who use drugs all the time. Also included in this analysis are those adolescents exhibiting a high number of depressive symptoms or low self-esteem or reporting poor health status.

adolescents exhibiting high rates of depressive symptoms, 15% report one risky behavior or outcome, but 19% experience three (data not shown).

Access to Health Care Services

The survey included an array of indicators of access to care, including having missed needed care, having a regular physician or health professional, and having a medical exam in the past year; these data are presented. In addition, the survey probed for the nature of communications between adolescents and physicians when contact occurred. Many of the adolescent health issues and risks described above require a doctor-patient relationship in which the adolescent feels comfortable to reveal such problems and in which the physician or other health professional initiates conversations about concerns and offers social and emotional counseling.

Compounding the higher incidence of poor physical and mental health, adolescents in the lowest-SES group are also at the highest risk for access barriers (Fig. 2): 29% of low-SES adolescents report not getting needed care, compared with 19% of adolescents in the higher-SES group. Also, 27% of low-SES adolescents report no regular doctor, and only 62% had a regular medical exam in the past

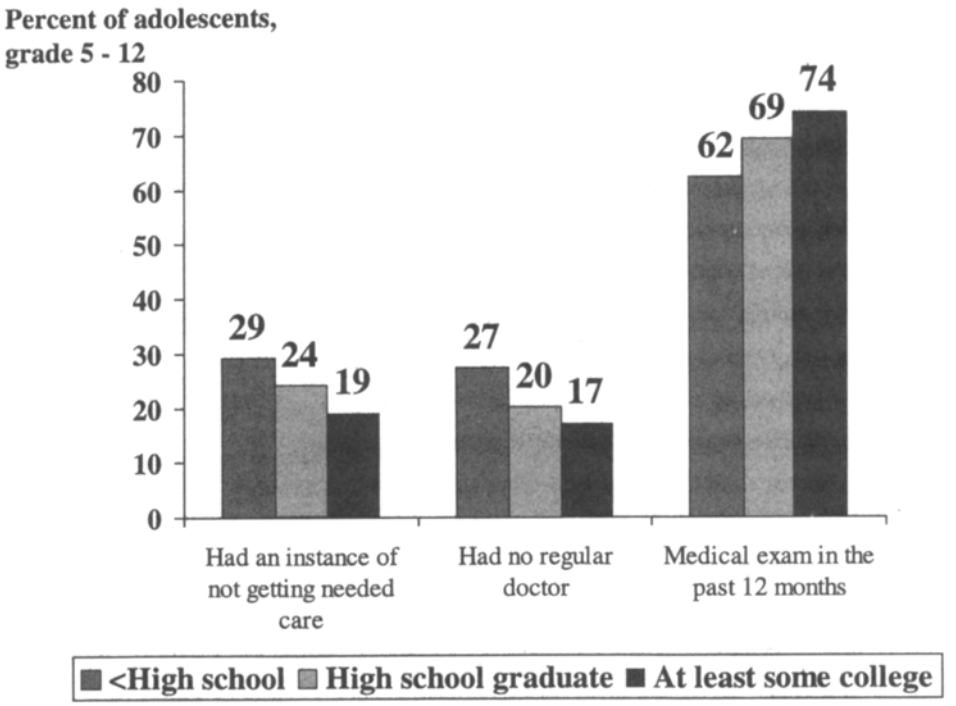

FIG. 2 Adolescents with less-educated mothers are at risk for access barriers. From Schoen et al.[3]

12 months. In comparison, 17% of higher-SES adolescents have no regular doctor, and 74% had a medical visit in the past 12 months. Low-SES adolescents are more likely to say care was received in a clinic or emergency room and less likely to go to a doctor's office than higher-SES adolescents (Table IV).

For those who missed needed care, serious health problems often went untreated. More than one-third of all adolescents report that not getting needed care was a very or somewhat serious problem. Low-SES adolescents are even more likely to say this was a serious problem (though not statistically significant): 47% of adolescents with the least-educated mothers report that not getting needed care was a serious problem.

Overall, adolescents' reasons for not getting needed care vary from adults. Over one-third of adolescents report they did not obtain needed care because they did not want to tell their parents. Confidentiality concerns are especially important among older girls. Low-SES adolescents do not vary significantly from others on the importance of confidentiality, but the cost of care raises the biggest barrier to getting needed care. Nearly one-half (49%) of adolescents with the least-educated mothers cite the cost of care or lack of insurance as the major reason for not getting care. They are also significantly more likely to say that lack of transportation was a barrier (Fig. 3).

TABLE IV Access Problems of Adolescents by Socioeconomic Status

	Total, % (N = 6,728)	Mothers Did Not Complete High School, % (n = 518)	Mothers Graduated from High School, % (n = 1,502)	Mothers Attended at Least Some College, % (n = 2,997)	*P*
Access to health care					
No regular doctor	19	27	20	17	.001
Usual source of care					
Doctor's office	65	51	59	66	.001
Clinic or health center	23	26	23	21	.001
Hospital or emergency room	5	14	13	9	.001
Regular exam in past 12 months	71	62	69	74	.001
Missed needed care	22	29	24	19	.001
Adolescents who missed needed care					
Serious problem not getting needed care	36	47	33	35	.151
Reasons for missing needed care					
Did not want to tell parents	36	35	38	35	.573
Cost or lack of insurance	31	49	33	28	.001
Lack of transportation	11	19	9	10	.003

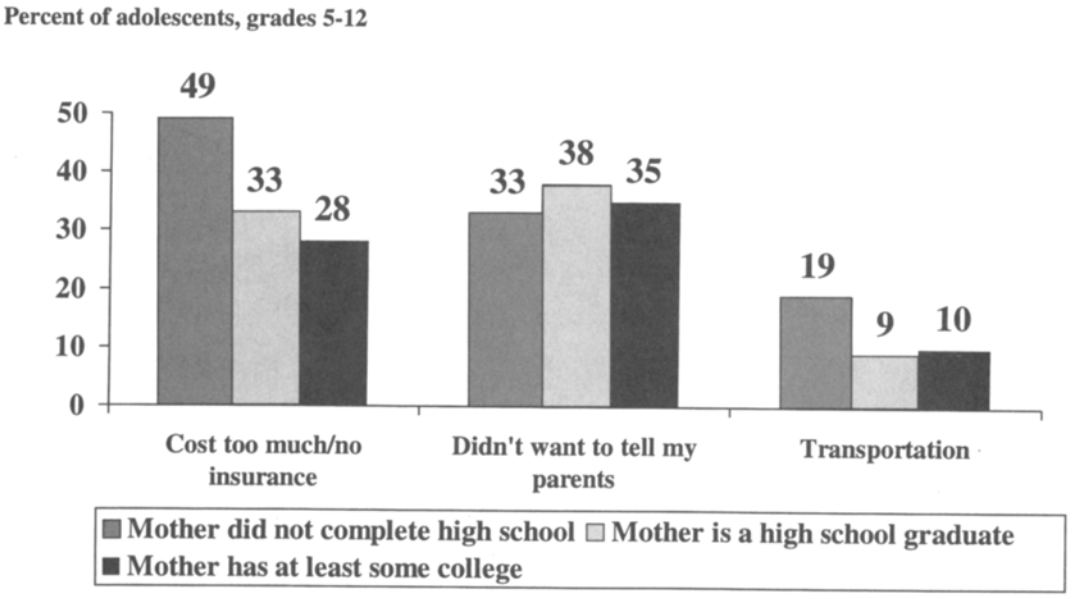

FIG. 3 Leading reasons adolescents do not get needed care, by socioeconomic status. From Schoen et al.[3]

Other groups of adolescents at risk for poor access to care are important to note because those characteristics are also more prevalent among the low-SES group of adolescents. Adolescents with poor mental health are not getting needed health care. Only one-third of adolescents exhibiting depressive symptoms report having seen a mental health professional in the last year. In addition, nearly one-half (44%) of those with a high number of depressive symptoms say they did not get needed care in the past year, compared with 18% of those with low or no depressive symptoms. Adolescents who have experienced sexual or physical abuse are more than twice as likely to forego needed care: 41% of abused adolescents, compared to 18% of nonabused adolescents, report an instance of not getting needed care. Adolescents with multiple risk factors are also more likely to report not getting needed care, obtaining care in a hospital emergency room, and feeling very unsafe in their home, neighborhood, or school.

The survey revealed that schools offer an important health care access point for adolescents at risk. Adolescents at extreme risk are more likely to say they used school-based health services. Thirteen percent of adolescents who had been physically or sexually abused more than once received care from the school nurse or clinic, 8% from the hospital emergency room, and 7% from a doctor's office. Of those adolescents who rarely or never feel safe at home, 16% obtained care in school, 12% at a hospital emergency room, and 7% in the doctor's office. In

comparison, less than 2% of all adolescents surveyed reported that they received care in school (data not shown).

Communication with physicians. Effective communication between physicians and adolescents is critical for doctors to convey important health information, provide counseling, and catch emerging health problems. The Fund's adolescent health survey, however, shows a considerable mismatch between the topics adolescents wish to discuss and what they actually discuss with their physicians. Adolescents want far more information on a range of sensitive topics (such as drinking, taking drugs, sexually transmitted diseases, abuse, and eating disorders) than they currently receive (Fig. 4). Interest in these topics varies only slightly by SES, with low-income adolescents wanting more information than higher-SES groups about physical and sexual abuse (49% vs. 41%) and sexually transmitted diseases (68% vs. 61%) (Table V).

Very few of these conversations, however, are taking place. Discussions about violence and abuse are particularly rare: only 12% of all adolescents say their doctors had ever discussed abuse with them. Doctors are slightly more likely to discuss sensitive issues with low-SES adolescents than with higher-SES adolescents, but since their interest in these topics is also slightly higher, the discordance between interest and actual conversations remains similar across income groups.

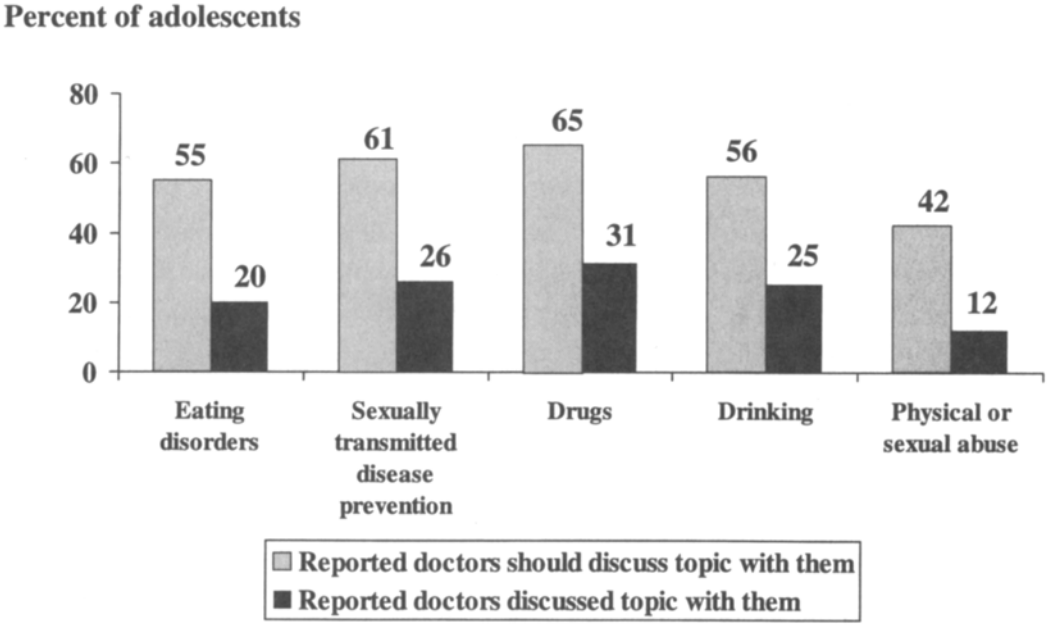

FIG. 4 Gaps exist between what adolescents believe doctors should discuss and what doctors have discussed. From Schoen et al.[3]

TABLE V Adolescents' Communication with Physicians

	Total, % (N = 6,728)	Mothers Did Not Complete High School, % (n = 518)	Mothers Graduated from High School, % (n = 1,502)	Mothers Attended at Least Some College, % (n = 2,997)	*P*
Adolescents report doctors should discuss					
Eating disorders	57	60	55	58	.040
Sexually transmitted diseases	63	68	64	61	.013
Drugs	65	65	67	65	.239
Drinking alcohol	56	57	58	55	.323
Physical or sexual buase	42	49	42	41	.003
Adolescents report that doctors have discussed					
Eating disorders	20	22	19	20	.319
Sexually transmitted diseases	26	32	26	25	.035
Drugs	31	34	30	31	.202
Drinking alcohol	25	26	23	26	.255
Physical or sexual abuse	12	17	11	11	.005
Ever too embarrassed to discuss a problem with a doctor					
Yes	30	38	30	29	.004

In general, doctors appear more likely to discuss safer issues, such as good eating habits and the importance of exercise (data not shown).

Much of the lack of communication between young people and their doctors may come from adolescents' embarrassment about discussing health issues: 30% of all adolescents report a time when they were too embarrassed or afraid to discuss a problem with their doctor or health professional. Low-income adolescents are more likely to recall a time when they were too embarrassed to talk about a health problem (38% vs. 29%). Although low-income adolescents report embarrassment, they would be less embarrassed to discuss birth control, pregnancy, physical and sexual abuse, sexuality, and other private concerns than higher-income adolescents. In general, low-income adolescents appear interested and willing to discuss sensitive issues; however, their experiences with physicians show that these conversations do not occur often enough, and when they occur, they may be unsatisfactory.

OPPORTUNITY TO INCREASE ADOLESCENT ACCESS TO APPROPRIATE HEALTH CARE SERVICES

Expanding insurance coverage and ensuring services reflective of adolescents' risks and health needs could make the health care system much more supportive

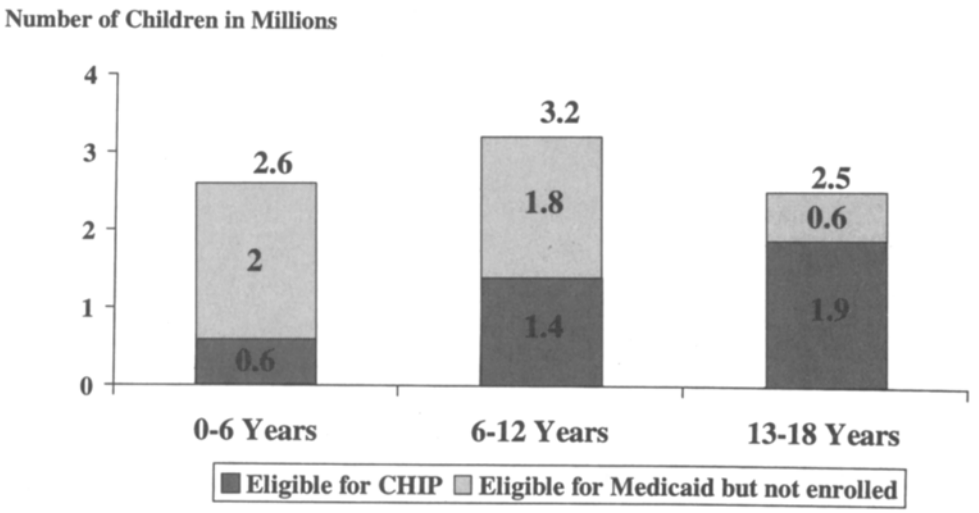

FIG. 5 Uninsured children eligible for CHIP and not enrolled in Medicaid, by age. From *AAP Analysis of 1994–1997 Demographic Profile, Current Population Survey.*

of the health and development of adolescents. The CHIP provides an opportunity to increase health insurance coverage for adolescents. Passed as part of the Balanced Budget Act of 1997, the intent of CHIP is to expand health insurance coverage to uninsured children under age 19 in families with incomes below 200% of poverty.[2]

Adolescents as a group stand to gain from CHIP. An estimated 1.9 million adolescents between 13 and 18 years of age are eligible for health insurance coverage under CHIP, more than any other group of children (Fig. 5).

Most states are expected to take advantage of the additional funding to expand coverage for adolescents through 18 years of age. Before the Balanced Budget Act of 1997, 9 states covered adolescents through 17 years of age and 8 states covered them through age 18 under state options to accelerate phasing of Medicaid to poor children. Of the 45 states (including Puerto Rico and the District of Columbia) that have submitted proposals to the Health Care Financing Administration for CHIP funding, half—23 states—have proposed covering children through 18 for the first time.*

In addition to new CHIP funding, an estimated 600,000 adolescents are currently eligible for Medicaid and are not enrolled. The current national focus on outreach and enrollment also will help increase adolescent coverage. With effec-

*See National Conference of State Legislatures, Children's health insurance: state action snapshot, July 18, 1998; available at http://www.ncsl.pro/programs/health/childchtp.htm. Also see tabulations by State Government and Chapters Affairs of the American Academy of Pediatrics.

tive outreach to low-income families, more than 2.5 million adolescents could gain health insurance coverage under CHIP or Medicaid.

IMPLICATIONS FOR HEALTH CARE DELIVERY

Providing health insurance coverage for adolescents would alleviate some of the obstacles to obtaining care, but our findings suggest that insurance alone would not guarantee adolescents access to needed care. The Fund's survey illustrates a vivid picture of the specific health issues young people face and cope with every day—sexual and physical abuse, violence at home, depression, and exposure to drugs and alcohol. Understanding the health care needs and behaviors of this population is critical to structuring an effective system of care. The findings point to four features critical to effective health care delivery for adolescents: physician training in adolescent health issues, assuring trust and confidentiality, access to mental health counseling, and easily accessible care.

Physician training. The high rates of abuse, depression, and violence sound an alarm that, as children grow, the potential risks children face are serious and can have long-lasting effects. Physicians must take time during the annual visit to make sure their medical history includes a full assessment of risk factors. Time during the visit also is needed to initiate discussion of sensitive topics when they arise. Resources need to be available to carry out counseling or refer adolescents for counseling that can both treat and prevent mental health problems.

To help physicians and other health care providers meet this challenge, we need to equip them with the necessary skills. Physicians caring for adolescent patients need training to understand the special health care needs of this population. Findings on missed opportunities to discuss sensitive topics with those at risk indicate the need to educate doctors and other health professionals to reach out to adolescents in ways that encourage them to discuss topics. Learning how to ask the right questions is a skill that would help providers diagnose and refer mental health problems to specialists. Clinics that provide age-appropriate services have increased adolescents' likelihood of disclosing sensitive information about risk-taking behaviors and emotional problems.[7,8]

To enable physicians to take the time, health insurance payments need to consider ways to expand payment protocols for care during adolescent years. Rather than limiting coverage to quick physical exams with little time to talk, budgets and payment will need to build in the flexibility for longer visits as necessary to facilitate fuller discussions. Adolescents also may be reluctant to talk about mental health concerns, worries about personal worth and self-confi-

dence, or risky behaviors unless given the chance to talk confidentially when needed.

Confidentiality and trust. Adolescents report that the singular most important factor in seeking care is how much they trust the professional they see for help.[9-11] Key to building trust is the confidence they feel that whatever is communicated to the trusted adult not be divulged to anyone.[12] Confidentiality is of critical importance to adolescents in need of reliable advice.

The rate of abuse and violence in the home suggests that many adolescents have much to fear. If health providers do not inculcate the necessary trust with their adolescent patients, our survey results indicate that they may talk to no one, and their problems may go undetected and untreated. Instead, troubled adolescents turn to alcohol, cigarettes, and drugs as a form of self-medication to relieve stress and forget their problems.

Easily accessible services. Adolescents need a convenient entry point into the health care system. Multiple doors must be kept open to make accessing services convenient and to facilitate finding providers that make them feel comfortable. While most adolescents will benefit solely from increased provider attention to sensitive issues, our survey findings show that adolescents at extreme risk are more likely to seek care at school. This highlights an important role of school-based or school-linked care, especially for high-risk adolescents, who may be unable to access other sources of care due to financial barriers, confidentiality concerns, or fear.

The shift to managed care in both public and private insurance presents both opportunity and uncertainty when treating adolescents. Both CHIP and Medicaid will rely heavily on managed-care plans to deliver care to children. The potential of managed care to coordinate care for adolescents could improve both their access and quality of care. The coordination of care in managed-care organizations also facilitates the possibility of measuring quality. Data-tracking systems could introduce the capacity to monitor and measure adolescents' utilization patterns, service needs, and health status over time. New initiatives to develop age-appropriate measures are under way and will contribute to the success and feasibility of collecting quality information.*

Addressing the health needs of low-income adolescents in a managed-care environment also will require careful consideration and innovative planning to

*The Foundation for Accountability, the National Committee for Quality Assurance, and the Agency for Health Care Policy and Research are collaborating to develop quality performance measures for pediatrics, including adolescent health.

achieve the kind of care described above. Adolescents want doctors to talk to them about sensitive issues, including pregnancy, drugs, sexual abuse, and eating disorders. For such a discussion to occur during an office visit takes time. However, cost-containment strategies have lead to a shorter and shorter doctor visit. The intensity of contact and level of guidance that adolescent patients need may be a challenge to the financial structure of managed-care plans.

Plans may fail to include an adequate number of specialists in their referral networks, particularly those specialists with expertise in treating adolescents. A national study by the American Academy of Pediatrics found that physicians often were unable to refer patients who needed care because the appropriate pediatric adolescent subspecialist was not available within the patient's managed-care plan.[8]

The adolescent survey underscores the importance of easily accessible services, particularly school-linked services, for high-risk youth. Many community providers that serve adolescents—teen clinics, school-based clinics, family planning clinics—often are not well integrated into the provider network or are excluded altogether. Furthermore, adolescents may not feel comfortable visiting a provider that their parents visit. Providing adolescents with coordinated, but confidential, care is a major challenge for managed-care plans and providers.

As the adolescent survey indicates, mental health services are an important part of adolescent health care. Managed-care plans tend to limit coverage for those services most needed by adolescents, including psychological counseling and health education.[8] If these services are "carved out" and covered on a fee-for-service basis to help facilitate access, aggressive coordination and outreach to appropriate providers is essential.

CONCLUSION

During the turbulent transition from childhood to adulthood, adolescents need a health care system that responds to their specific health care needs. Analysis of the low-SES adolescents in the Commonwealth Fund's *Survey of the Health of Adolescent Girls* provides a picture of the disturbingly high risks faced by these adolescents and the strong likelihood that they are not receiving help through the health care system. We are missing opportunities to address adolescents' health.

The key is to provide adequate benefits in a system that is both coordinated and confidential. As young people struggle with sensitive issues, health care providers can be both an anchor and an outlet to help them reject forces by which they put themselves at risk. To help physicians and other providers meet this challenge, we need to equip them with the necessary skills. Services need

to be convenient to attract adolescents into the system. Financial arrangements and health systems must address the health care needs of the population and therefore pay for extended doctor visits and ensure confidentiality.

Finally, a concerted communitywide effort to see that all adolescents grow up safe also is critical. The survey shows that our children are not growing up safe, and that low-SES adolescents are especially at risk. Experience with abuse or violence during childhood or adolescence can affect one's health status through adulthood.[13] Furthermore, being abused or subjected to violence is a leading risk factor in violent or harmful behavior.[14] These are among the adolescents who say they do not get care when needed. Improving our health care system to ensure adolescents at high risk get into the health care system and get the care they need has significant a long-term payoff: producing a healthy and productive American society.

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